REMARKS

Claims 1 to 17 are pending in the present application. By this amendment, claims 1, 7, 15 and 17 have been amended. In view of the above amendments and the following remarks, it is respectfully submitted that claims 1 to 17 are allowable, and reconsideration is respectfully requested.

Applicants first note with appreciation the Examiner's finding of allowable subject matter in the claims. The Examiner has indicated that claim 15 would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112, second paragraph (discussed below) and to include all of the limitations of the base claim and any intervening claims.

It is noted that claim 1 has been amended to more clearly recite that which is described in the specification. In particular, the fourth paragraph of the claim now reads "an opening element to open the sealing part" as opposed to the previous recitation of "an opening element connected to the second connector element to open the opening element." Support for this amendment can be found, for example, in the specification on page 14, lines 6 to 12.

The drawings have been objected to as failing to comply with 37 CFR 1.84(p)(4) because, according to the Examiner, reference characters "114"/"214" and "116"/"216" have both been used to designate an outer socket connector. It is explained in the specification that "[t]he portions of outer socket connectors 116, 216 near the connection side define opening elements 114, 214." Page 11, lines 17 to 19. Thus, in order to forward prosecution of this application, the drawings have been amended to more clearly depict the position of the opening elements 116 and 216 as described in the specification. No new matter has been added. Applicants respectfully submit that the drawings comply with 37 CFR 1.84(p)(4) and it is therefore respectfully requested that this objection be withdrawn.

Similar to the above objection, the drawings have been objected to under 37 CFR 1.83(a) as failing to show every feature of the invention specified in the claims. Specifically, the Examiner contends that the opening element of the outer socket connector and the opening element of the inner socket connector must be shown or the features must be canceled from the claims. As mentioned above, the drawings have been amended to better

illustrate the description of the opening elements as set forth in the specification. Applicants respectfully submit that the drawings comply with 37 CFR 1.83(a) and therefore it is respectfully requested that this objection be withdrawn.

Also related to the aforementioned objections, claims 7 and 8 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicants regard as the invention. According the Examiner, Applicants recite "an opening element formed of an outer socket connector." The Examiner continues, arguing that "[i]t is unclear whether the opening element is some portion of the outer socket connector, the outer socket connector is some portion of the opening element or they are just the same element." As previously explained with reference to the specification, opening elements 114 and 214 are each respectively a portion of outer socket connectors 116 and 216. Claim 7 has been amended to better reflect the specification in this regard. Thus, claim 7 now recites an opening element that is defined by a portion of outer socket connector as described in the specification. It is respectfully submitted that in light of this amendment, this rejection should be withdrawn as to claim 7 and as to claim 8 which depends therefrom.

Claim 15 has also been rejected under 35 U.S.C. 112, second paragraph. According to the Examiner, there is insufficient antecedent basis for the limitation of "the opening element of a second socket connector." Applicants have amended the claim to recite "a projection for engaging a second inner socket connector." Support for this amendment can be found, for example, in Figure 5 of the application where the projection is shown to engage the inner socket connector. Considering this amendment, Applicants respectfully request that this rejection be withdrawn.

Claims 1 to 4, 6, 7, 9 to 14, and 17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,492,147 ("Challender et al."). Applicants submit that Challender et al. do not anticipate the present claims for the following reasons.

Amended claim 1 recites a connector element for connecting a fluid line, preferably a length of tubing, cannulas or catheters to a second connector element. The connector includes a conduit for conveying a flowing medium. Additionally provided is a sealing part moveable

relative to the conduit between a closed position and an open position. The sealing part is adapted for sealing the conduit from an ambient atmosphere when in the closed position. The connector also includes an opening element to open the sealing part while forming the connection, wherein the sealing part does not contact the conduit either when in the closed position or in the open position.

Claim 17 has been amended to include the features of claim 1. Claim 17 now recites a method for connecting fluid lines, preferably first and second lengths of tubing, cannulas or catheters. The method includes the step of attaching a first connector element to the first length and a second connector to the second length. Next, there is the step of pushing a housing of the second connector element into a housing of the first connector element, so that an outer socket connector of the first connector element acts on a sealing part of the second connector element to open the sealing part of the second connector element, wherein the sealing part of the second connector is movable relative to a conduit of the second connector and the sealing part of the second connector does not contact the conduit of the second connector either when in the closed or open position. Likewise, an outer socket connector of the second connector element acts on a sealing part of the first connector element to open the sealing part of the first connector element, wherein the sealing part of the first connector is movable relative to a conduit of the first connector and the sealing part of the first connector does not contact the conduit of the first connector either when in the closed or open position. There is also the step of further pushing the housing of the second connector element into the housing of the first connector element, so that a recessed inner socket connector of the first connector element forms a continuous conduit with a recessed inner socket connector of the second connector element. Also, there is the step of further pushing the housing of the second connector element into the housing of the first connector element so that a penetration body of the first connector element opens shut off elements of the first and second connector elements.

To anticipate a claim, each and every element as set forth in the claim must be found in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). That is, the prior art

must describe the elements arranged as required by the claims. In re Bond, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990).

Challender et al. purportedly disclose a dry break connection for joining together opposing passageways. According to Challender et al., the connection has been designed to prevent moisture or liquid from being spilled or remain on opposing ends of the connection when the connection is separated. The Examiner contends that Challender et al. disclose "a connector element having a conduit, sealing part locked to housing 51, opening element, an annular gap between a housing and an opening element, and a shut-off element 32/70."

Notwithstanding the Examiner's contentions, Challender et al. fail to disclose each and every element of Applicants' invention as set forth in independent claims 1 and 17. This is not surprising considering that the device disclosed by Challender et al. is not specifically designed—as is Applicants device—to provide a sterile connection by remaining sealed keeping a connector element sealed with respect to the ambient atmosphere until a connection is made. Instead, Challender et al. have purportedly disclosed a device that is meant to prevent spillage after disconnection of a coupling. There is no disclosure whatsoever by Challender et al. related to solving the problem considered by Applicants.

As for absent elements, to begin, it respectfully submitted that the "sealing part locked to housing 51" of Challender et al. simply is not capable of "moving relative to the conduit" as recited in claim 1 of the application. Instead, the sealing part remains fixed between the exterior wall surface portion 44 and the cylindrical inner wall portion 51 which does not move relative to the conduit. Thus, this male coupling portion of the device cannot anticipate device disclosed in claim 1 of the application.

Now considering the female portion of the device in Challender et al., it is respectfully submitted that this portion fails to —as recited in claim 1— include a "sealing part [that] does not contact the conduit either when in the closed position or in the open position." On the contrary, before the male and female couplings are even connected to one another, rubber septum 70 is in contact with components that are in direct contact with passageway 73. Moreover, during connection, septum 70 rubs against these components, heightening the possibility for contamination. As explained in the application, "[i]t is essential for the sealing

part to be guided or opened in such a way as to prevent contact with the areas for conveying the medium in all stages of movement of the sealing part." Page 6, lines 5 to 8. Applicants accomplish this by having "[a]n opening element 114, 214 consisting of outer socket connectors 116, 216 [] arranged according to the present embodiment in housing 108, 208. Between the outside surface of outer socket connectors 116, 216 and the inside surface of housing 108, 208, there is an annular gap in which the movable sealing part 110, 210 is displaceably accommodated." Page 11, lines 8 to 13. Importantly, as shown in the Figures, the outer socket connectors are apart from the inner socket connectors that serve as the conduit. It is this configuration that allows for the non-contact feature mentioned above. As this feature is absent from the female coupling portion of Challender et al., this reference cannot anticipate the claims.

All the features of the Applicants invention are not taught by Challender et al. In turn, it is respectfully requested that this rejection is withdrawn as to claims 1 and 17. Moreover, claims 2 to 4, 6, 7, and 9 to 14 depend from claim 1, contain all the limitations thereof, and are should therefore allowable as well.

Claims 5 and 8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Challender et al. Applicants respectfully submit that Challender et al. does not render obvious claims 5 and 8. Moreover, claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Challender et al. in further view of U.S. Patent No. 4,508,367 ("Oreopoulos et al."). Applicants respectfully submit that the combination of Challender et al. and Oreopoulos et al. do not render obvious claims 16.

To render a claim obvious, the prior art must teach or suggest all of the claim limitations. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). Moreover, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion or motivation to do so. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the modification must be found in the prior art and not in the Applicants' disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

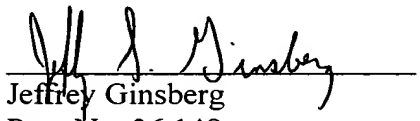
Claims 5, 8, and 16 ultimately depend from claim 1 and include all of the limitations thereof. As more fully set forth above, Challender et al. fail to teach, or even suggest, as recited in amended claim 1 of the application, "a sealing part movable relative to the conduit...wherein the sealing part does not contact the conduit." Because Challender et al., alone or in combination with Oreopoulos et al., does not teach or suggest all of the limitations of claims 5, 8, and 16, it is submitted that these claims are not rendered obvious thereby.

Attached hereto is a marked-up version of the changes made to the Specification and claims by the current Amendment. The attached page is captioned "**Version with Markings to Show Changes Made.**"

Applicant submits that this application is in condition for allowance and respectfully requests that such action be taken. If for any reason the Examiner believes that prosecution of this application would be advanced by contact with the Applicant's representative, the Examiner is invited to contact the undersigned at the telephone number given below.

Respectfully submitted,

KENYON & KENYON

Dated: September 21, 2001 By: 

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Version with Markings to Show Changes Made

IN THE DRAWINGS:

The drawings have been amended as indicated in red ink as indicated in the enclosed new Figures 1, 3, 4, and 8.

IN THE CLAIMS:

Claims 1, 7, 15, and 17 have been amended as follows:

1. (Amended) A connector element for connecting a fluid line, preferably a length of tubing, cannulas or catheters to a second connector element, comprising:

a conduit for conveying a flowing medium;

a sealing part moveable relative to the conduit between a closed position and an open position, adapted for sealing the conduit from an ambient atmosphere when in the closed position; and

an opening element [connected to the second connector element] to open the [opening element] sealing part while forming the connection, wherein the sealing part does not contact the conduit either when in the closed position or in the open position.

7. (Amended) The connector element according to Claim 6, wherein the opening element is defined by a portion [formed] of an outer socket connector surrounding the conduit for conveying the medium.

15. (Amended) The connector element according to Claim 14, wherein the penetration body comprises a projection for engaging [the opening element of] a second inner socket connector of the second connector element when forming the connection.

17. (Amended) A method for connecting fluid lines, preferably first and second lengths of tubing, cannulas or catheters, comprising:

attaching a first connector element to the first length and a second connector to the second length;

pushing a housing of the second connector element into [an] a housing of the first connector element, so that an outer socket connector of the first connector element acts on a

sealing part of the second connector element to open the sealing part of the second connector element, wherein the sealing part of the second connector is movable relative to a conduit of the second connector and the sealing part of the second connector does not contact the conduit of the second connector either when in the closed or open position, and an outer socket connector of the second connector element acts on a sealing part of the first connector element to open the sealing part of the first connector element, wherein the sealing part of the first connector is movable relative to a conduit of the first connector and the sealing part of the first connector does not contact the conduit of the first connector either when in the closed or open position;

further pushing the housing of the second connector element into the housing of the first connector element, so that a recessed inner socket connector of the first connector element forms a continuous conduit with a recessed inner socket connector of the second connector element; and

further pushing the housing of the second connector element into the housing of the first connector element so that a penetration body of the first connector element opens shut off elements of the first and second connector elements.

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